



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,008	02/04/2004	Michael G. Reynolds	GP-303308	4085
7590	07/27/2005			EXAMINER ROJAS, BERNARD
LESLIE C. HODGES General Motors Corporation Mail Code 482-C23--B21 P.O. Box 300 Detroit, MI 48265-3000			ART UNIT 2832	PAPER NUMBER
DATE MAILED: 07/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/772,008	REYNOLDS ET AL.
	Examiner	Art Unit
	Bernard Rojas	2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-7 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date ____.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: ____.

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by van Namen [US 5,896,076].

Claim 1, van Namen discloses a magnetic force generator [figure 3] comprising:
a magnetic shell [12, col. 7 lines 38-43] internally defining an armature chamber having an axis [in the direction of 16, figure 4]
at least three circumferential electric coils [C1, C2, C3] spaced axially within the chamber;

an armature supported in the chamber for reciprocation on the axis, the armature including a plurality of aligned magnets [M1, M2] separated by at least one intermediate magnetic steel plate [P2] sandwiched between like poles of adjoining magnets and a pair of end steel magnetic plates [P1, Pn] on opposite ends of the armature, the plates extending laterally to a periphery of the armature in general lateral alignment with the electric coils [figure 4]; and

resilient members [S1, S2] nominally centering the armature between ends of the chamber [E1, E2];

controlled energizing of the coils being operative on the magnetic plates to reciprocate the armature axially in a controlled manner relative to the shell to develop an opposite inertia force on the shell for application to a connected body [col. 7 lines 58-63 and col. 8 lines 6-28].

Claim 2, van Namen discloses a magnetic force generator as in claim 1 wherein the resilient members are compression springs [figure 4].

Claim 3, van Namen discloses that the device can be expanded to any multiple by the addition of coils, magnets and rings [col. 8 lines 46-54].

Claim 4, van Namen discloses a magnetic force generator as in claim 1 wherein the aligned magnets are ring magnets [figure 4, the magnets are ring magnets since shaft 16 passes through the magnets so the armature can move along the shaft].

Claim 5, van Namen discloses a magnetic force generator as in claim 1 wherein the number of the intermediate and end steel magnetic plates in the armature is equal to the number of the circumferential electric coils spaced within the shell [figure 4, the

device can be expanded to include any n number of coil and plates as shown by the use of P_n and C_n , col. 8 lines 46-54].

Claim 6, van Namen discloses a magnetic force generator as in claim 1 wherein the magnetic shell is part of a housing including non-magnetic end members closing the ends of the chamber figure 4, col. 8 line 65 to col. 9 line 4].

Claim 7, van Namen discloses a magnetic force generator [figure 3] comprising:
a magnetic shell [12, col. 7 lines 38-43] internally defining an armature chamber having an axis [in the direction of 16, figure 4]

at least three circumferential electric coils [C1, C2, C3] spaced axially within the chamber;

an armature supported in the chamber for reciprocation on the axis, the armature including a plurality of aligned magnets [M1, M2] separated by at least one intermediate magnetic steel plate [P2] sandwiched between like poles of adjoining magnets and a pair of end steel magnetic plates [P1, P_n] on opposite ends of the armature, the plates extending laterally to a periphery of the armature in general lateral alignment with the electric coils [figure 4]; and

resilient members [S1, S2] nominally centering the armature between non-magnetic ends of the chamber [E1, E2, col. 7 lines 38-43, col. 8 line 65 to col. 9 line 4]; controlled energizing of the coils being operative on the magnetic plates to reciprocate the armature axially in a controlled manner relative to the shell to develop an opposite inertia force on the shell for application to a connected body [col. 7 lines 58-63 and col. 8 lines 6-28].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bernard Rojas
Br

2
LINCOLN CAJUN
PRIMARY EXAMINER
GROUP 2100